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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,049	04/15/2004	Kiyoshi Nishikawa		7408

7590 08/23/2007
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EXAMINER

RENNER, CRAIG A

ART UNIT	PAPER NUMBER
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2627

MAIL DATE	DELIVERY MODE
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08/23/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/825,049

Applicant(s)

NISHIKAWA ET AL.

Examiner

Craig A. Renner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 19 July 2007 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. In lines 1-3 of claim 1, it is indefinite as to how a "single pole magnetic head" can comprise a plurality of poles, i.e., an "auxiliary pole" and a "main pole".

b. Claims 2-8 inherit the indefiniteness associated with independent claim 1 and stand rejected as well.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 6, and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Sasaki et al. (US 2004/0145826).

Sasaki et al. (US 2004/0145826) teaches a single pole magnetic head (FIGS. 24A thru 41B, for instance) comprising an auxiliary pole (40); a main pole (112a) terminated at a position receding from a medium-opposed surface (as shown in FIG. 35A, for instance), the main pole having a lower surface opposed to the auxiliary pole at a distance (as shown in FIG. 35A, for instance); a connection piece (41a) connecting the rear of the main pole to the auxiliary pole at a center of a coil pattern (includes 45, for instance); an intermediate magnetic layer (114a) extending forward toward the medium-opposed surface from an upper surface of the main pole and terminating at a position receding from the medium-opposed surface (as shown in FIG. 36A, for instance); and a tip magnetic layer (120) extending to the medium-opposed surface from an upper surface of the intermediate magnetic layer (as shown in FIG. 39A, for instance), and being exposed at the medium-opposed surface (as shown in FIG. 39A, for instance) [as per claim 1]; wherein a flat surface is defined on a surface of the main

pole so as to receive the intermediate magnetic layer (as shown in FIG. 36A, for instance) [as per claim 6]; and wherein a flat surface is defined on a surface of the intermediate magnetic layer so as to receive the tip magnetic layer (as shown in FIG. 39A, for instance) [as per claim 7].

6. Claims 1, 3, 6, and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Shukh et al. (US 2004/0252415).

Shukh et al. (US 2004/0252415) teaches a single pole magnetic head (FIGS. 2-4, for instance) comprising an auxiliary pole (106); a main pole (122) terminated at a position receding from a medium-opposed surface (as shown in FIG. 2, for instance), the main pole having a lower surface opposed to the auxiliary pole at a distance (as shown in FIG. 2, for instance); a connection piece (108) connecting the rear of the main pole to the auxiliary pole at a center of a coil pattern (110); an intermediate magnetic layer (123) extending forward toward the medium-opposed surface from an upper surface of the main pole and terminating at a position receding from the medium-opposed surface (as shown in FIG. 2, for instance); and a tip magnetic layer (126) extending to the medium-opposed surface from an upper surface of the intermediate magnetic layer (as shown in FIG. 2, for instance), and being exposed at the medium-opposed surface (as shown in FIG. 2, for instance) [as per claim 1]; wherein a primary magnetic pole tip region is defined in the tip magnetic layer, the primary magnetic pole tip region extending rearward from the medium-opposed surface, keeping a constant lateral width (as shown in FIG. 4, for instance) [as per claim 3]; wherein a flat surface is

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defined on a surface of the main pole so as to receive the intermediate magnetic layer (as shown in FIG. 2, for instance) [as per claim 6]; and wherein a flat surface is defined on a surface of the intermediate magnetic layer so as to receive the tip magnetic layer (as shown in FIG. 2, for instance) [as per claim 7].

Pertinent Prior Art

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. This includes Sasaki et al. (US 2005/0185337), which teaches a single pole magnetic head comprising an auxiliary pole (211); a main pole (217) terminated at a position receding from a medium-opposed surface (as shown in FIG. 3, for instance), the main pole having a lower surface opposed to the auxiliary pole at a distance (as shown in FIG. 35, for instance); a connection piece (216) connecting the rear of the main pole to the auxiliary pole at a center of a coil pattern (includes 231, for instance); an intermediate magnetic layer (218) extending forward toward the medium-opposed surface from an upper surface of the main pole and terminating at a position receding from the medium-opposed surface (as shown in FIG. 3, for instance); and a tip magnetic layer (221) extending to the medium-opposed surface from an upper surface of the intermediate magnetic layer (as shown in FIG. 3, for instance), and being exposed at the medium-opposed surface (as shown in FIG. 3, for instance).

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Allowable Subject Matter

8. Claims 2, 4, 5, and 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

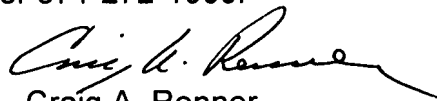
Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig A. Renner whose telephone number is (571) 272-7580. The examiner can normally be reached on Tuesday-Friday 9:00 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Craig A. Renner
Primary Examiner
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CAR